

Growth: The Journal of the Association for Christians in Student Development

Volume 1

Number 1 *The State of Christian Student Affairs*

Article 9

2001

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Stephen T. Beers

John Brown University

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Recommended Citation

Beers, Stephen T. (2001) "The Effects of a Study Abroad/Mission Trip on the Faith Development of College Students," *Growth: The Journal of the Association for Christians in Student Development*: Vol. 1 : No. 1 , Article 9.

Available at: https://pillars.taylor.edu/acsd_growth/vol1/iss1/9

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The Effects of a Study Abroad/Mission Trip on the Faith Development of College Students

By Stephen T. Beers, Ed.D.

College frames the critical years of development within a person's life span (Astin, 1978; Chickering, 1969). There are transformational changes that occur within the college student during the college experience (Astin, 1978). These changes are illustrated by the evolutionary and revolutionary adaptations taking place among the diverse and unique facets of each individual.

There are more than 4,000 higher educational institutions in the United States of America. Approximately 100 of them are members of a non-profit organization called the Council for Christian Colleges and Universities (CCCCU), formerly known as the Coalition for Christian Colleges and Universities. A CCCCU college or university is similar in many ways to the other 4,000-plus higher education institutions in the United States of America. A major outcome goal of these 100-plus institutions is the integration of the students' faith and learning.

Membership criteria for colleges and universities in the CCCCU include "an institutional mission based upon the centrality of Jesus Christ and evidence of how faith is integrated with the institutions' academic and student life programs" (CCCCU, 1998, p.6). This focus on faith development integration is also evident from a list of "common reasons" why students attend a CCCCU institution (CCCCU, 1998, p.7). The way each institution incorporates faith development opportunities into the students' experience and the specific Christian tradition with which these faith development opportunities are aligned are as unique as the institutions themselves.

The interest in and importance of faith development is seen in the prominent

Stephen T. Beers, Ed.D., is the Vice President for Student Development at John Brown University in Siloam Springs, Arkansas.

roles that the supernatural, organized religion, and theology play in recorded history. However, not until the last thirty years has the scientific research community begun to examine faith development as a serious research topic. Faith development theorists and researchers focused their studies on three major areas: 1) the description of faith in a stage development paradigm; 2) the developmental transitions of faith; and 3) the core dimensions of faith development.

One of the most prominent faith development stage theorists is James Fowler. Fowler states that the development of faith is linear and can be categorized in six stages. Fowler's six stages culminate in a "universalizing faith" (Fowler, 1984). Sharon Parks, another faith development stage theorist, utilizes the theoretical framework of Fowler's stages. She focuses her attention on the faith development of college students (Parks, 1986).

A less-prominent but important stage theorist is V. Bailey Gillespie. He suggests a model that roughly correlates with the person's life cycle: 1) borrowed faith (early childhood); 2) reflected faith (middle childhood); 3) personalized faith (early adolescence); 4) established faith (later youth); 5) reordered faith (young adults); 6) reflective faith (middle adults); and 7) resolute faith (older adults) (Gillespie, 1988).

John Westerhoff proposes four general faith stages: 1) experienced; 2) affiliated; 3) searching; and 4) owned (Litchfield, 1995). Westerhoff's model provides a simple outline for the faith development process. This stage model can be utilized to describe faith development in its micro movements (changes within each stage) and macro movements (changes from stage to stage within a lifetime).

Taking a different approach to faith development theory is James Loder. His research focus is on the transitions within faith rather than on the actual stages that a person might grow through. Loder (1982) believes that an individual's faith develops during a crisis situation. He titles his theory as the "Transforming moment." The "Transforming moment" consists of five steps: 1) contradiction; 2) interlude for scanning; 3) constructive act of imagination; 4) opening; and 5) reinterpretation (Loder & Fowler, 1982). An example of this "Transforming moment" might occur when a college student finds out that her father has died of cancer. She may experience a contradiction in faith as she attempts to understand how a "loving God" could allow her father to die so early in life. It is through both this mental wrestling process and the reinterpretation process that her faith is eventually transformed.

A third focus in faith development research, the study of the core dimensions of faith development, is seen in Peter Benson and Carolyn Eklín's research. They state that

based on interviews with theological scholars and denominational executives, open-ended surveys of several hundred adults from the six participating denominations, and reviews of the literature in psychology and religion, we posited that a person of mature faith integrates eight core dimensions of faith (Benson & Eklín, 1990, p. 10).

Benson and Eklin then collapse the eight core dimensions into two overall themes: 1) *vertical* and 2) *horizontal*. The eight core dimensions were studied and representative indicators of a maturing faith were developed for each.

Cutting across the three areas of study listed above, and of particular interest to the present study, is the research project titled *Faith Development in the Adult Life Cycle*. In this project, Kenneth Stokes (Stokes, 1986, as cited in Vanlue, 1996) provides insight into the development of faith among adults. The study found that:

- Crisis experiences, both positive and negative, appear to be the major factor in the stimulation of faith development.
 - The young adult years and middle-life are times of particular ferment and often rethinking of one's faith structures.
 - Involvement with social issues and concerns appears to enhance faith development.
 - A balance between the "cognitive" and the "affective" dimensions of one's faith development is highly important.
 - Non-traditional forms of education often lead to greater maturity in one's faith development
- (Stokes, 1986, as cited in Vanlue, 1996, p. 133).

In summary, Stoke's findings include: 1) appropriately managed "crisis experience;" 2) sensitivity to a balance between the "cognitive" and "affective" dimensions of one's faith; 3) opportunities for involvement with social issues; and 4) utilization of non-traditional forms of education. These aspects are critical aspects of the development of faith.

Additional support for Stoke's findings comes from Gillespie's work. Gillespie suggests that Christian faith development programs for individuals in the college-age period need to include at least six areas of focus. The first focus is to develop in the student an understanding and acceptance of religious values and attitudes.

The second focus involves the student grappling with the nature of the church (defined as the Christian community). The third focus involves connecting the secular world's prominent issues with the student's faith. Fourth, there needs to be an invitation for the student to participate in the kingdom of God (the kingdom of God is defined as the spiritual or supernatural aspects of reality that is in concert with God's volitional will). The last two areas are the need for the program to be permeated by the "spiritual" and the need for the program to nurture the student's ability to grasp abstract religious concepts (Gillespie, 1988).

One example of a non-traditional educational program which focuses on the students' faith development and that utilizes the principle components of the research cited is a Study Abroad/Mission (SAM) Trip. A SAM trip consists of a student's exposure to the host culture (geography, climate, economics), and also includes instrumental exposure and participation in a ministry experience such as community development, labor with or for the poor, acts of mercy, evangelism, and/or discipleship. The SAM experience combines the student's engagement or participation in service to the

world with intentional spiritual reflection. As well as providing the student the time and the tools to reflect and process the specific SAM experiences in terms of social and faith development. Many of the CCCU institutions utilize this educational format.

One particular SAM program, titled "Lighthouse," operates out of Taylor University, a Christian university and a member of the CCCU. The stated objectives of the "Lighthouse" program are to:

- Expose students to cultures outside of their own backgrounds
 - Provide global orientation
 - Help students see the individual subject matter from the perspective of the host culture
 - Help students become accepting of cultures other than their own
 - Provide exposure to the host culture's perception of world issues
 - Help students recognize the interdependence of human beings despite cultural differences
 - Provide students the opportunity to test experientially the truth claims of their Christian worldview
 - Provide students the opportunity for servant-learning by submitting to host missionaries and national leaders
 - Help students develop a hands-on awareness of the host country's economic, social, educational, geographical, governmental, and religious distinctive
 - Provide students with an exposure to mission organizations for possible future involvement
- (Lighthouse Handbook, 1998, p. 25).

The program utilizes traditional and non-traditional forms of education. One non-traditional method of education used by the Lighthouse program is placing students into a foreign culture and requiring specific interaction with the local community. This exposure consists of living and working within the host community. A specific example of this is living in or near a remote African village (on a Non-government Organization [NGO] compound). In this location the students might work with nationals in building an orphanage, aiding in a local medical clinic, or teaching local children at the elementary school. This "experience" (e.g., involvement with local people concerning specific social issues) coupled with regular times of related reading, reflection, and discussion, provides the opportunity for a balance of "cognitive" and "affective."

An article published in the December 12, 1997 issue of *The Chronicle of Higher Education* stated that during the 1995-96 academic year, almost 90,000 U.S. students participated in international study abroad programs (an increase of 5.7% over the previous year). There were 2,371 programs administered in 80 countries, more than double the number in the previous year, as recorded in *The Institute of International Education Directory* for 1996-97.

The proliferation of study abroad trips (and in particular, study abroad trips with a mission emphasis) has not been accompanied by indicative research evidence to support the underlying assumptions of the programs. This research problem is not

unique to international educational mission experiences. This problem, lack of research concerning institutional stated goals, plagues all institutions of higher education (Gardiner, 1998).

Purpose of the Research

In the field of post-secondary education, there is a lack of research on matters of faith development. There are a number of studies on value and moral development (e.g., Terenzini, 1995; Colby, 1995) and character development (e.g., Kuh, 1997), but there remains a lack of research concerning college students' faith development. In particular, the author found only one research study on assessing Christian College students' faith development specific to such programs as SAM trips.

The purpose of this study was to provide reliable research findings concerning the relationship between the faith development of Christian college students and their involvement in a SAM program. This study was conducted with Christian college students who attended a one-month SAM trip in January 1999 during their college experience. The report also provides comparative information about the faith development of students who attended a SAM trip and the faith development of similar students who took a class "on campus" (OC) during the same time period.

Research Questions

This study answers the following questions: (1) What is the impact of a one-month study abroad mission trip sponsored by a Christian university on Christian college students' faith development as measured by the *Faith Maturity Scale* (FMS) (Benson, Donahue, & Erickson, 1993), the *Growth in Mature Faith Index* (GMFI) (Benson & Eklin, 1990), and a qualitative survey? (2) How does the study abroad/mission student's faith development compare with that of students who take classes on campus for the same time period?

METHODOLOGY

Population and Sample

The sample of students for this study came from the greater student population at Taylor University in Upland, Indiana. Established in 1846, Taylor now boasts an enrollment of more than 2,400 undergraduate students divided between its two campuses in northeastern Indiana. Taylor's mission indicates, as part of its institutional goal, a commitment to the development of the student's faith or spiritual development (Taylor University Catalogue, 1998).

There were a total of 171 students taking part in the study. All were involved in one of two Taylor sponsored educational experiences over the month of January 1999 (J-Term 1999): 1) a study abroad/mission (SAM) trip (total number of SAM students = 72 completed surveys of the 75 in attendance); 2) a class that met "on campus"

(OC) during the same January term (total number of OC students = 99). The instructors for the SAM trip as well as the OC classes were Taylor University faculty.

The SAM trips included all of the five trips sponsored by the university's "Lighthouse" program. The SAM students participated in a trip to Ghana West Africa, The Bahamas, India, Venezuela, or Australia. The total number of Taylor student participants in the Lighthouse SAM trips for 1999 was 75.

The OC classes surveyed met on campus during the January term with enrollment totaling 99 students. The OC courses included two psychology classes (Ethics in Psychology and Child Psychology) and one Bible class (Biblical Literature I).

The students who participate in SAM trips go through an application process and are chosen from an applicant pool of current Taylor students. Lighthouse trip acceptance criteria is based largely on age, gender equity of team, application references, and usability of the student's major in the field. Acceptance rates for all of the SAM trips are approximately 80%. The students who attend the SAM trip generally raise money from friends and family to participate in the program (trip costs ranged from \$1,700 to \$3,000).

Instrument Description

The Faith Maturity Scale (FMS) survey is a 38 item self-reporting survey developed to study faith maturity among six "mainline" Protestant denominations. Benson, Donahue, and Erickson (1993) posited that a person of mature faith integrates eight core dimensions of faith. They are:

1. Trusts in God's saving grace and believes firmly in the humanity and divinity of Jesus.
2. Experiences a sense of personal well-being, security, and peace.
3. Integrates faith and life, seeing work, family, social relationships, and political choices as part of one's religious life.
4. Seeks spiritual growth through study, reflection, prayer, and discussion with others.
5. Seeks to be a part of a community of believers in which people give witness to their faith and support and nourish one another.
6. Holds life-affirming values, including commitment to racial and gender equality, affirmation of cultural and religious diversity, and a personal sense of responsibility for the welfare of others.
7. Advocates social and global change to bring about greater social justice.
8. Serves humanity, consistently and passionately, through acts of love and justice (p. 6).

The eight core dimensions were studied and representative indicators of a

maturing faith were developed through the 38 questions. The researchers then collapsed the eight core dimensions into two overall themes: 1) *vertical* and 2) *horizontal*. The two scales taken together provide the researcher a pattern or "faith type" as defined by Benson, Donahue, and Erickson (1993). The four types of faith are *undeveloped, vertical faith, horizontal faith, and integrated faith*.

The questions in the inventory have been constructed to assess different aspects of spiritual maturity. The survey uses a seven-point Likert scale with the following values assigned to the response: 1= never true; 2= rarely true; 3= true once in a while; 4= sometimes true; 5= often true; 6= almost always true; and 7= always true.

The author also included eight demographic questions to provide additional insight into the research data. These eight questions reference the individual's gender, religious and denominational affiliation, religious commitment, and year in school.

The internal consistency reliability of the FMS survey ranges from .85 to .89 when testing specifically for faith maturity. When testing specifically for the *vertical* dimension, reliability ranges from .86 to .88. When testing specifically for the *horizontal* dimension, the reliability ranges from .82 to .85.

The *Growth in Mature Faith Index* is based upon the same foundational assumptions as the FMS, but its purpose is to collect self-assessment data for growth (maturation) in faith over the past two to three years. The students chose from weighted answers placed on a five-point Likert scale. The answers are: 1= much less than now; 2= somewhat less now; 3= about the same as 2 or 3 years ago; 4= somewhat greater than now; and 5= much greater than now. Internal consistency reliability data for the GMFI ranges from .85 to .88.

The students who participated in the SAM trip were also surveyed with a qualitative assessment tool. The survey asked the students to evaluate their experience. The survey included six questions with question number six comprised of three parts. The questions are:

1. The thing I liked best about my missions project was...
2. The thing that made my missions project most unpleasant was...
3. The most significant lesson God taught me was...
4. The area in my life where I saw the greatest change was...
5. My host country personnel helped me understand...
6. List three concise ways the Lighthouse objectives were realized:
 - A. Interpersonal growth:
 - B. Cross-cultural education:
 - C. Mission outreach:

Data Collection Methods

The *Faith Questionnaire* (FQ) (a compilation of the *Faith Maturity Scale* [FMS] and the *Growth in Mature Faith Index* [GMFI]) was given was given to the SAM participants at the final team meeting during finals week of the fall semester, two

weeks prior to the SAM trip. For the students who were on campus, the first FQ was distributed during the second class period of the January term. The SAM participants were post-tested with the FQ questionnaire and the qualitative survey during a meeting within two weeks after the completion of the trip. The OC students were post-tested on the Wednesday of the last week of the January term.

The third assessment tool was a qualitative survey that was used to assess the students' perception of their own development. The survey was also utilized to evaluate the program. This survey was given only to the students who were engaged in the SAM trip. Most students made use of a short answer (one to three sentences) format when completing the questions.

Data Analysis

The research project was essentially a quasi-experimental research design, with experimental control attained by homogeneous selection (Merriam & Simpson, 1995). Over 90% of Taylor students are white, over 95% are in the traditional age (17-25). Over 75% come from the top 20% of their high school class and have a high school GPA of 3.5 or better. Taylor University states that 98% of their student body claim to be Christian (Taylor Internal Publication, 1998).

The statistical analyses for assessing change in pre- to post-survey results of the FMS and GMFI were calculated by using a matched pairs t-test analysis. The test compared the FMS mean difference and the GMFI mean difference (pre- to post-) for the SAM students. Testing was also completed with the two sample t-test to test for SAM student's gains against OC student's gains as measured in the FMS and GMFI. Last, specific survey questions that showed significant differences in gains between groups were studied for changes using both the two sample t-test and the matched pairs t-test. Sample sizes were considered large ($72 > 40$) and the level of statistical significance was set at $\alpha = 0.05$.

The two sample t-test was chosen over the 2X2 ANOVA because there were only two levels of the independent variable (SAM and OC) (Moore, 1995; Vokcell & Asher, 1995). The researcher chose to use a two-sample t-test on the mean differences instead of ANCOVA for two reasons: (1) ANCOVA has the added assumption of parallelism that the two-sample t-test does not have, and (2) there were only two levels of the independent variable (SAM and OC).

A statistical demographic description, using both pre- and post-scores, was provided for each of the sample groups. Additional statistical comparisons were done with pre- and post-scores for individual questions as calculated by the matched pairs t-test. The matched pairs t-test was used because the test provided for specific question to question assessment. The surveys were coded in such a way as to utilize the matched pairs t-test. For those question items that show a significant shift from the pre- to post-test, the researcher provided additional focus.

RESULTS

General Demographic

The return rate for both the pre- and post-survey for the SAM participants was 83.3% and the OC group return rate was 87.9%.

Age

The ages for the 147 respondents to this question ranged from 17 to 21 years, with the mean age at 19.4 and a mode age of 20. The mean and mode age for the SAM students was approximately 20 years old, while the OC students' mean and mode age was 19 years old.

Gender

The gender breakdown for the study population was 43% male and 57% female. The SAM group was a little more balanced with 45% male and 55% female, and the OC group gender ratio was 41% female and 59% male. The SAM group ratios were more consistent with the university's current population gender ratio at 46% male and 54% female for the 1998-99 school year. Gender equality for the SAM group was adjusted by the selection process because gender equality for each trip was a priority.

Religious Affiliation

There were 19 religious denominations listed from which students could choose to represent their religious preference. Twenty-nine percent listed "independent" and an additional 29% were a compilation of American Baptist, Methodist, and Presbyterian.

Faith Commitment

The first four questions of the survey dealt with the faith commitment of the student. A total of 96.4% of the students on the pre-survey stated that they were born again. Three percent stated that they were not, and one individual stated that he or she was not sure. All the "not" or "not sure" responses were within the OC group.

Question two asked students who were born again to list the length of time they had been born again. Forty-three percent of the born again students stated that they had been so for 11-15 years. Another 23% stated that they had become born again at least 16 years ago. Four percent of the students stated that they had become born again within the last three years.

Question five asked the students to describe their personal belief concerning a core orthodox Christian doctrine (i.e., the deity of Jesus Christ). The majority (98-100%) of the student responses fall in line with orthodox theology, evangelical theol-

ogy, and the accepted theology of Taylor University. These theologies define Jesus as God and personal savior of those individuals who respond to His invitation.

Research Question Number One

The first research question was, "What is the impact of a one-month study abroad/mission trip sponsored by a Christian university on a Christian college student's faith development as measured by the *Faith Maturity Scale* (FMS) and the *Growth in Mature Faith Index* (GMFI)?" Research question one assessed the growth in faith development of the SAM students from before they went on the SAM trip to after the trip.

FMS Scores and Testing Results Related to Research Question One

The SAM students' pre-trip score on the FMS was 5.06 with 59 students completing both pre- and post-surveys. The mean difference between the pre- and post-survey scores for the SAM students' FMS was 0.1056. The p-value was 0.07709 for the sample size of 59. There was an increase in the mean difference between the pre- and post-trip scores, but the increase was not significant at the $\alpha = 0.05$ level.

GMFI Scores and Testing Results Related to Research Question One

The pre-trip SAM survey score for GMFI was 3.17 and the post-score was 3.20, with 58 students completing the survey. There was an increase in the pre- to post-GMFI test score with a mean difference of 0.028. Statistical analysis for the GMFI was calculated using the matched pairs t-test for mean differences. The p-value was 0.42637. This is not significant at the $\alpha = 0.05$ level.

Also, while SAM students' GMFI survey scores did not significantly increase, the OC students' GMFI scores actually decreased, although not at the statistically significant level.

Qualitative Survey Results for SAM Students

In addition to the two quantitative surveys, the researcher surveyed the SAM students with a qualitative survey. The answers the 68 SAM students provided ranged from 10 to 40 different responses per question.

Qualitative Question One

Question one of the qualitative survey asked the students what they liked best on the trip. Twenty of the respondents (30%) stated that working with other team members was most enjoyable, followed by building relationships with people of a different culture with sixteen responses (24%). The third and fourth ranked responses were similar: working with children had eight responses, and building relationships with people and team members had six responses (total percentage for the third and

fourth responses was 21%). The next answer was "being able to reach out to the lost" with five responses. The top four answers (75%) are similar in that they have the core aspect of building relationships (horizontal aspect of faith).

Qualitative Question Two

The second question asked of the students was, "What was the thing that made my mission project most unpleasant?" The students stated that tensions and frustrations within the group were most prevalent (eleven responses or 17%). Five students stated that nothing was unpleasant and another five stated that they found health problems to be the most bothersome. The next two most frequent responses were lack of follow-up with the nationals with whom they came in contact, and that the students felt they were never sure what they were doing each day (each with four responses). Each of the next five responses was written by three students each: 1) seeing poverty and "unreached" people; 2) overcrowded vans; 3) having to leave; 4) trip was too short or inability to adapt to the local culture; and 5) fellow students' attitudes.

Qualitative Question Three

Question three was "The most significant lesson God taught me was" Twelve students (18%) stated that they learned they must trust God for everything. Six students (9%) stated that they better understood their own significance and how they needed to be available to be used by God. Four students stated that they better understood that God has a plan for everything, and another four students felt they learned that ministry is not something that individuals are "called" into but instead ministry should be a part of everyday life. "Learning patience when I can't see the end results" was the response of four of the students.

Qualitative Question Four

Question four asked the students to report the area of their lives that saw the greatest change. Over 25% suggested that they saw the greatest change in their relationship to Christ (*vertical* development). From that 25%, ten students (14%) listed a new found boldness for Christ and seven students (11%) stated that the experience helped develop their personal relationship with Christ. There were additional responses related to the students' relationship with God, (e.g., learning not to limit God and the betterment of their own prayer life).

Eight students (11%) stated that they had a better understanding of the uselessness of material things. Six students (9%) stated that they learned how to understand and look for the good in others. Other responses related to the students' call to serve other people (e.g., perspective about missions and learning how to evangelize).

Qualitative Question Five

Question five asks the student what their host country personnel helped them understand. Fifty-four percent of the students (thirty five responses) stated that the host personnel helped them understand the culture and the people of the country. The second most common response (4) was "I do not need much (in terms of material things) to be joyful in Christ."

Qualitative Question Six

The sixth and final question from the qualitative survey asked the student to list concisely the ways that the Lighthouse objectives were realized. The question was divided into three parts: interpersonal, cross-cultural, and mission outreach.

Interpersonal growth

In the interpersonal portion of the question, close to 40% of the students stated that the "team bonding" and the "development of relationships with the nationals and those on the trip" were critical parts of the experience. There were also eight students who listed that they had grown in their personal relationship with Christ, and another five indicated that they learned more of "who they are."

Cross-cultural education

The second part of this question related to the SAM trip objectives of "exposing the students to cross-cultural experiences" and helping "students become more accepting of cultures other than their own." The students overwhelmingly stated (75%) that the SAM trip goal was reached through the exposure to the host culture by the host nationals. The other responses also related to aspects of exposure to a different culture.

Mission outreach

The third part of the sixth question covered the students' response to how the SAM trip met the objective of a mission outreach. Close to 46% of the students (31responses) suggested that the team's involvement with evangelism or evangelistic performance was critical in meeting the objectives. Another sixteen students (23%) felt that lifestyle or acts of kindness (e.g., construction) each day were the ways that they met the objectives for the mission aspect of the SAM trip.

Research Question Number Two

The second research question posed in the study was, "How does the SAM students' faith development compare with that of students who take classes on-campus for the same time period?" Analysis was done comparing (post- minus pre-) mean difference using a two sample t-test for the SAM group and the OC control group. This analysis compares the two student groups' change in faith development that occurred.

FMS Scores and Testing Results Related to Research Question Two

The FMS mean difference for the SAM group was 0.1056 while the OC group's was 0.0220. The p-value was 0.2073, comparing these two groups' change in faith maturity. This p-value was not significant at the $\alpha = 0.05$ level of significance. When looking at the (*vertical and horizontal*) sub-scales, one sees that the p-value for the difference between the two groups' change was also not significant at the $\alpha = 0.05$ level (*vertical* = 0.4451, *horizontal* = 0.6278).

GMFI Scores and Testing Results Related to Research Question Two

The researcher found a p-value of 0.1824. The SAM groups' mean difference was 0.0282 while the OC's GMFI mean difference was -0.1230. The p-value was not significant at the $\alpha = 0.05$ level of significance. Therefore, there is no significant statistical difference when comparing the mean difference, that is, the change that occurred in the students' faith from the pre-survey to the post-survey, between the SAM and OC students.

FMS and GMFI Individual Questions with Significant Comparative Changes

Some individual survey question's statistical analyses assisted in answering the two research questions. The researcher noted responses that showed a significant difference in change between the two groups when tested with the two sample t-test. There were seven out of 55 questions (13%) that showed significant differences in change between the two groups (as seen in Tables 1 and Table 2). The difference in

Table 1.
Significant Differences Between Student Groups' Mean of the Difference
for Seven Individual Questions
(two sample t-test)

Quest.	OC mean(n)	SAM mean(n)	t-value	df	p-value
16	-0.43 (81)	0.24 (58)	-2.75	137	0.0034
23	-0.32 (81)	0.29 (58)	-2.59	137	0.0053
26	-0.25 (81)	0.47 (58)	-2.91	137	0.0021
31	-0.43 (80)	0.14 (58)	-2.29	136	0.0118
38	-0.20 (81)	0.52 (58)	-2.30	137	0.0113
52	-0.21 (80)	0.22 (58)	-1.78	136	0.0387
59	-0.36 (80)	0.05 (57)	-1.67	135	0.0456

Table 2.
Matched Pairs t-test (one-tailed) Results for Seven Questions Comparing OC
and SAM p-values

Question	P-values	
	OC Group	SAM group
16	0.9941	0.0817
23	0.9685	0.0259
26	0.9360	0.0068
31	0.9956	0.2350
38	0.9257	0.0526
52	0.9339	0.1502
59	0.9840	0.3948

the faith maturity gains between the SAM students and the OC students for individual questions was of interest since each question tested for a specific characteristic of faith maturity (Benson, Donahue, & Erickson, 1993; Benson & Eklin, 1990).

This additional testing can inflate the alpha and increases the probability of making a Type I error (the error of rejecting the Null Hypothesis when it is true). Therefore, the reader should be careful when interpreting the individual question analysis.

FO Survey Question Sixteen (reverse scoring)

For question 16, "I have a hard time accepting myself," the mean difference for the OC groups was negative while the mean difference for the SAM groups was positive. The two groups changed significantly compared to one another.

FO Survey Question Twenty-three

Question 23, "I accept people whose religious beliefs are different from mine," was analyzed using a one-tailed matched pairs t-test. The OC group's mean difference did not increase over the course of the month while the SAM group had a significant increase at the $\alpha = 0.05$ level over the J-term.

FO Survey Question Twenty-six (reverse scoring)

Question 26 asked the student to rate themselves concerning the statement, "I

feel overwhelmed by all the responsibilities and obligations I have." Using a one-tailed matched pairs t-test, the OC group statistics did not increase while the SAM group statistics increased significantly at the $\alpha = 0.05$ level over the J-term.

FQ Survey Question Thirty-one (reverse scoring)

Question 31 makes the statement, "I do not understand how a loving God can allow so much pain and suffering in the world." The OC students increased their questioning of God while the SAM students decreased in their questioning. The two groups changed significantly compared to one another.

FQ Survey Question Thirty-eight (reverse scoring)

Question 38 asked the students to respond to the statement, "My life is filled with stress and anxiety." The two groups changed significantly compared to one another. Using a one-tailed matched pairs t-test, one sees that the OC students' statistics did not increase over the course of the month while the SAM group statistics decreased slightly over the same time period.

FQ Survey Question Fifty-two

Question 52 asked the students to rate themselves concerning the query, "The amount of time I spend reading and studying the Bible." The OC students did not increase their time reading and studying the Bible during the month while the SAM students had an increase in their amount of time studying and reading the Bible. The two groups changed significantly compared to one another.

FQ Survey Question Fifty-nine

The students responded to Question 59's query "The degree to which I am convinced that God is active in the world." The OC students did not increase in their perception of God's activity within the world, while the SAM students had a slight increase in their perception of God's activity in the world. The two groups changed significantly compared to one another.

FMS Results Compared to National Averages

The analysis of the scores shows that the SAM group and the OC group scored higher on the FMS survey when compared to the national average for all adults and each of the specific age groups, as seen in Table 3. The SAM student's post-score was 5.16 and the OC students scored 4.90. These FMS results placed both groups on the edge of the "moderate" (scores between 3-5) to "high" (scores between 5-7) category for "mature faith." The SAM group's pre- and post-scores placed them

significantly higher, at the 95% confidence level, than the national norms for all groups.

Table 3.
The SAM and OC FMS Survey Results Compared to National Mainline Denominational Averages for Age and Gender

Group	Score	
All Adults	4.63	
20-29 years old	4.40	
30-39 years old	4.45	
40-49 years old	4.53	
50-59 years old	4.66	
60-69 years old	4.78	
70- + years old	4.96	
Males	4.51	
Females	4.71	
	Pre-trip	Post-trip
SAM	5.0557 (59)	5.1568 (59)
OC	4.8761 (83)	4.9087 (83)

None of the specific age groups listed in the Benson and Eklun study scored in the "high" rank of faith maturity. The age group that was closest was seventy years old and older which scored a 4.96. The SAM students have scored well above the national average for all adults.

The *vertical* score for the SAM group (pre-trip 5.81, post-trip 5.91) was significantly higher than the national average for all adults (5.06) by at least .75 and higher by about 1.0 point for the 20-29 age group (4.82). This score placed the SAM trip participants in the "high" area of the *Faith Maturity Vertical Scale*, as seen in Table 4.

The pre-trip *horizontal* score for the SAM trip participants was 4.24, while the post-trip *horizontal* score for the SAM trip participants was 4.30. Both of these are higher than the national average for the students' age group (20-29 year olds) by approximately a half point (.53, .57), and higher than the national average for all adults by the slight margin of .13-.17. The pre- and post-scores place the SAM students in the upper half of the "moderate" category of the *Faith Maturity Horizontal Scale*, as seen in Table 4.

Table 4.
The Vertical and Horizontal Dimensions of FMS Compared to National Mainline Denominational Averages for Age and Gender

Group	Vertical score		Horizontal score	
All Adults	5.06		4.13	
20-29 years old	4.82		3.74	
30-39 years old	4.84		3.89	
40-49 years old	4.91		4.08	
50-59 years old	5.11		4.05	
60-69 years old	5.18		4.38	
70- + years old	5.54		4.57	
Males	4.78		4.02	
Females	5.22		4.19	
	Pre-trip	Post-trip	Pre-trip	Post-trip
SAM	5.81 (59)	5.91 (59)	4.24 (59)	4.30 (59)
OC	5.61 (83)	5.69 (83)	3.93 (83)	4.13 (83)

The SAM students' scores on the combined *vertical* and *horizontal* scales, categorized within the "faith types" developed by Benson and Eklun, fall at the top end of the "vertical faith" and close to the "integrated faith." Benson and Eklun's scale ranges from an "underdeveloped" faith to a "vertical" or "horizontal" faith with the most developed faith being the "integrated" faith. The national average for "all adults" who score within the "vertical faith" area is 10% and the "integrated faith" area is 34%. For the 20-29 year old group there is 12% "vertical" and 16% "integrated."

GENERAL DISCUSSION CONCERNING FINDINGS

Quantitative Findings

The overall FMS and GFMS quantitative survey findings showed that there was not any significant faith growth measured at the 0.05 level of significance for the SAM or the control group over the one-month time frame. There were, however, individual questions within each of the quantitative surveys that yielded specific findings helpful in understanding changes to the SAM students that occurred while on the trip. Within the individual question research analysis, the researcher found two main areas of faith growth with the SAM students when compared to the OC group's growth.

These areas were an increase in "sensitivity to cultural diversity" (core dimension six), and an increase of "a sense of personal well-being" (core dimension two). The core dimensions are listed in the introduction section.

One additional interesting note was that the SAM student's quantitative score for the FMS post-score (five plus on a seven point scale) was above the national norm for all ages. This aspect created a ceiling effect. This ceiling effect was consistent with Kathleen Tuttle's (1998) dissertation research findings on short-term missions and its effects on the faith development of college students.

Qualitative Findings

The qualitative analysis showed (self-reported) growth in six of the eight core dimensions of faith. The strongest development was in "sensitivity to cultural diversity," increased experiences of a "sense of well-being," and an increase in the "connection with a community of believers" as the major aspects of their development.

An interesting finding in the study that overlapped with Tuttle's (1998) qualitative findings is that when the SAM students were asked what was "the most significant lesson God has taught me," the answer *trusting God concerning life experiences* was related to three of the top five responses. In Tuttle's study, she found that 22% of the students surveyed from the short-term experience indicated "they have a better understanding of how they fit into God's plan" (p. 271). Additional discussions concerning each of these specific findings are listed as they relate to specific developmental theories and program recommendations.

Conclusions as Related to Different Areas of the Educational Program and Experience

This section is organized into specific conclusions as they relate specifically to six different areas of study. These six areas are: 1) Faith Development Theories; 2) Student Development Theorists; 3) Adult Education theory; 4) Experiential Education Theory; 5) Christian Education Theory; and 6) Mentoring and Discipleship.

Conclusions Related to Faith Development Theories

The SAM experience created stress and the opportunity for "crises" to be experienced by the students. The SAM experience also created opportunities for students to experience "contradiction" with their faith maturity development. These two aspects of the SAM experience connected with the central thesis of the faith developmental theories (e.g., Fowler, 1976; Parks, 1986; Westerhoff, 1995; and Loder & Fowler, 1982).

Loder specifically states that the student begins the faith developmental process with the advent of the faith "contradiction." As an example, the SAM students stated that a major unpleasant aspect of the trip was "not knowing" what was to happen next. Later in the study, the students stated that the primary lesson that God taught

them was to "trust in Him with their life plan." This aspect of inviting a natural faith issues crisis or contradiction, and coupling it with the opportunity for reflection, seems to be one of the most important aspects of the SAM experience.

Conclusions as Related to Student Development Theory

The SAM trip provides opportunity for students to develop in many of the seven vectors (areas of a student's development) as identified by Chickering (1969). As examples, the researcher has identified three specific vectors that are clearly connected to the SAM students' survey responses. The first is the "development of mature interpersonal relationships." The students on the SAM trip showed an increase in their acceptance of people who have different religious beliefs. The students also stated that the relationships they experienced and developed on the trip were what they liked most.

The SAM experience provided opportunities for the development of a second and third vector. When asked what God had taught the students during the SAM experience, they stated that they were learning to trust God with the plan of their life (Chickering's vectors - developing identity and purpose). They also felt that "evangelization" (Benson and Eklin's dimensions of faith - sharing their faith and providing acts of kindness) needed to be an important part of the remaining portion of their life (developing identity and purpose).

It is clear that the SAM trip experience is an important tool in the development of the Christian university student. It is also clear that much of the development that takes place is directly related to the student's maturing relationship, identity development, and the formation of one's purpose.

Conclusions Related to Adult Education Theory

Similar to student development theory, adult education theory provides methodology and philosophy that can assist the SAM programmers in providing a framework to build a powerful SAM experience. There are five assumptions espoused by Knowles, a prominent adult education theorist, for the adult learner. The author has listed aspects of the SAM trips that coincide with Knowles' assumptions:

- 1) Student's need for learning (SAM student involvement is self-initiated and program success depends on the students' actions);
- 2) learning is problem-centered (SAM students are engaged in acts of kindness that are directed by the student group within a foreign culture and lend themselves to a problem centered education);
- 3) experience should be used (SAM students engage in journaling and debriefing during the trip);
- 4) learning should be self-directed (SAM students immerse themselves into the host culture); and
- 5) learner is highly motivated (SAM students are self-supporting and self-initiated).

All of these adult education philosophical assumptions are integral to the SAM experience. In part, these aspects surface through the challenge of entering a foreign culture and working on specific problems related to the mission. The author believes that it would be advantageous to clearly integrate adult education philosophy

and methodology with the SAM experience.

Conclusions Related to Experiential Education Theory

A major key to the experiential educational learning/developmental process is the reflective-processing time. This "processing" time is consistent with the importance given the "preparation and debriefing" time which Tuttle (1998) and others suggest is critical to faith development experiences.

The SAM experience coincides with the "five phase" experiential education model provided by Joplin (1995). The five phases of the model are: 1) the experience; 2) the challenge; 3) support; 4) feedback; and 5) reflection. For example, during the SAM *experience* each team member is engaged in and challenged by the experiences of the trip. All *challenges* are diverse yet integrated. During the experience, the students are *supported* by the SAM community. The team members receive constant *feedback* from the staff, students, and host community. And last, the students take time to *debrief* and *reflect* upon the experience. This experiential learning paradigm provides direction and help for the educator to create opportunities for faith education, faith development, and faith maturation.

The author believes that experiential education philosophy fits well with the experiential learning aspect of the SAM trip. The role and influence of experiential education philosophy and methodology should be expanded.

Conclusions Related to Christian Education Theory

The author believes that the connection between the SAM experience outcomes and the underlying objectives of a Christian education ("developing connections between fellows and God" as expressed by Coe, (1911) and the Council for Christian Colleges, (1998), shows the necessity of utilizing the SAM experience as a major tool in the educational process of the Christian college student.

When the SAM students were asked what was the greatest change they saw in themselves, they responded that it was in their relationship to God. When asked what they "liked best" and how they were challenged "interpersonally," they wrote about their relationships among the SAM group participants as well as those individuals with whom they came in contact on the trip.

Conclusions Related to Mentoring and Discipleship

The students' SAM experience can be seen as a journey experience. This experiential journey, (including the crisis) as M. Scott Peck and others suggest, if reflected upon, is a powerful tool in the maturing process. The SAM program should capitalize on the mentoring relationship available within the experience.

The author believes that the role of mentoring or discipleship within the SAM experience will become more pronounced as the research continues. The SAM students surveyed spoke highly of their connection with peers, the people they met in the

country, and the students' country host as major aspects of the SAM educational experience. The role of mentoring as it relates to faith development can be seen in the research of Hauerwas (1991), Janssen (1990), and Williams (1993).

RECOMMENDATIONS FOR COLLEGE PRACTITIONERS AND PROGRAMS

The research suggested that the methods of instruction on a SAM trip experience should include the methods used in adult education, experiential education, and student development programs. The need to provide experiences that utilize stress and crisis, while providing support and a time of reflection and processing, seems to be important.

Second, the ability for the SAM experience to provide opportunities to affect more than the faith development of the student should be capitalized. The segregation of Chickering's seven vectors of development from the specific development of the students' faith will be difficult. Instead, the researcher should look at a systemic developmental process that is inclusive of the faith and the personal development of the student.

Third, the students' interaction with the host culture is a critical part of the SAM program. It would seem that the more direct the interaction is with the host culture and the more the student is challenged to reflect upon their own faith issues, the more successful the program is likely to become. The students commented positively on the critical role the host personnel are playing in providing a more complete understanding of the host country and culture.

Fourth, the preparation, reflection, and debriefing of the SAM experience are important parts of the learning and developmental process. The preparation of the student may include review of the demographic, economic, and cultural aspects of the country. The reflection process may include daily or weekly times where the team processes what they are seeing and feeling. The debriefing should include time for the student to "scan" and "reinterpret" what they believe. The reflection process may be the most important aspect of the SAM faith development experience. Therefore, it is important to connect the reflection process with issues that focus on critical aspects of faith development.

Fifth, the programmer or facilitator of a SAM experience must understand the critical role that crises plays in the students' development, and will not want to shy away from the controlled crisis experience. Instead, they must learn to utilize the crisis for development.

The sixth and last recommendation is that the SAM experience should be organized to address as many of the core issues or aspects of faith development as possible. For example, a SAM trip program will want the students to engage in social and global experiences meant to bring about greater social justice. This will provide a clearer connection with the specifics of the students' faith development.

RESEARCH ISSUES

Assessment Instruments for Faith Development

The author believes that there is a need for further development of an instrument sensitive to faith changes over a one-month period. Additional sensitivity to the length of the instrument and reduction of the ceiling effects with the Christian college student may be difficult, but important; nevertheless, another important and needed development is the development of a survey with a clear connection to biblical Scripture. The CCCU schools hold closely to biblical doctrine and, therefore, they would appreciate an assessment tool that is closely connected to their biblical theology. Last, it would be best if an integrated pair of surveys were developed, one quantitative and the other qualitative. This would provide the researcher better data concerning each of the specific aspects of the faith developmental process.

At this time, the FMS is still the best survey available to assess faith development of the Christian college student. The FMS's underlying assumptions about faith maturity are most congruent with the underlying assumptions of faith development by Taylor University and the Council for Christian Colleges and Universities. The other assessment instruments reviewed equated faith development to what the author believes are peripheral issues, such as "openness to change" or "readiness to face existential questions without reducing their complexity."

Recommendations for Further Research

Additional research will need to be facilitated to better understand the faith development of college students as related to their involvement in a one-month study abroad SAM experience. The following is a list of recommendations for further research on this topic:

1. There is a need for the development of a reliable and valid survey with a quantitative and qualitative component to test for faith maturity within a short-term experience. It may be most helpful if the newly developed survey is also sensitive to issues related to long-term faith maturity.
2. Development of longitudinal research concerning the effects of a SAM experience on faith maturity is needed.
3. Further development of defined and testable aspects of faith maturity, specific to college involvement with a SAM program, would provide a baseline for continued research.
4. An additional research option would be to conduct a similar research project with a larger and more diverse sample of students sensitive to gender, race, and Christian denomination affiliation (e.g., where a university requires all or a large number of its students to participate).

References

- Astin, A. (1978). Four Critical Years. San Francisco: Jossey-Bass.
- Benson, P. L., Donahue, M. J., & Erickson, J. A. (1993). The Faith Maturity Scale: Conceptualization, Measurement, and Empirical Validation. Research in the Social Scientific Study of Religion. Vol. 5, 1-26.
- Benson, P. L. & Eklin, C. H. (1990). Effective Christian Education: A national study of protestant congregations. Minneapolis: Search Institute.
- Chickering, A. W. (1969). Education and Identity. San Francisco: Jossey-Bass.
- Chickering, A. W. & Reisser L. (1993). Education and Identity Second Edition. San Francisco: Jossey-Bass.
- Coalition of Christian Colleges and Universities. (1998). Resource Guide for Christian Higher Education. Washington D.C.: Coalition for Christian Colleges and Universities.
- Coe, G. A. (1911). Education in Religion and Morals. London: Fleming H. Revell.
- Colby, A. (1995). The Development of Exceptional Moral Commitment. Proceedings of the Institute on College Student Values 1995. 31-42.
- Fowler, J. W. (1976). Stages of Faith. San Francisco: Harper & Row.
- Fowler, J. W. (1984). Becoming Adult, Becoming Christian. San Francisco: Harper & Row.
- Gardiner, L. (1998). Redesigning Higher Education: Producing Dramatic Gains in Student Learning. (ASHE-ERIC Higher Education Report Volume 23, No. 7.) Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Gillespie, V. (1988). The Experience of Faith. Birmingham, Alabama: Religious Education Press.
- Hauerwas, S. (1991, October 2). Discipleship as a Craft, Church as a Disciplined Community. The Christian Century. 881-884.
- Institute of International Education Directory for 1996-97.

- Janssen, E. L. (1990). Creating Community: A Paradigm for the Development of Counter-Cultural Faith Communities. (Masters Theses, Wartburg Theological Seminary, 1990). Masters Abstracts International, 22355037.
- Joplin, L. (1995). On Defining Experiential Education. In Warren, K., Sakofs, M., and Hunt, J. Editors. The Theory of Experiential Education. Dubuque, Iowa: Kendall/Hunt.
- Kuh, G. (1997). Do Environments Matter? A Comparative Analysis of the Impress of Different Types of Colleges and Universities on Character Development. Proceedings of the Institute on College Student Values 1997. 15-30.
- Litchfield, R. G. (1995). Are There Maps for the Milestones? : A Look at Faith Development. Paper presented at the meeting of the Association for Christians in Student Development. Anderson, Indiana.
- Loder, J. E. & Fowler, J. W. (1982). Conversations of Fowler's Stages of Faith and Loder's The Transforming Moment. Religious Education, 77, (2), 133-148.
- Merriam, S. B. & Simpson, E. L. (1995). A Guide to Research for Educators and Trainers of Adults. Malabar, Florida: Krieger Publishing Company.
- Moore, D. S. (1995). The Basic Practice of Statistics. New York: W. H. Freeman.
- Pascarella, E. & Terenzini, P. (1991). How College Affects Students: Findings and insights from twenty years of research. San Francisco: Jossey-Bass.
- Parks, S. (1986). The Critical Years. San Francisco: Harper.
- Peck, M. Scott. (1997). The Road Less Traveled and Beyond: Spiritual growth in an age of anxiety. New York: Simon & Schuster Incorporated
- Taylor University. 1996-98 Catalog. Upland: Taylor University Press.
- Taylor University. Internal Publication 1998. Unpublished manuscript, Taylor University.
- Taylor University. Lighthouse Handbook 1997-98. Unpublished manuscript, Taylor University.
- Terenzini, P. (1995). How Colleges and Universities Shape Student Values. Proceedings of the Institute on College Student Values 1995. 21-30.

- Tuttle, K. A. (1998). The Effects of Short-term Missions Experiences on College Students' Spiritual Growth and Maturity. (A Doctoral Dissertation of Talbot School of Theology Biola University, 1998). Dissertation Abstract International.
- Vanlue, N. (1996). A Meta-Analysis of the Concepts, Characteristics, and Variables Addressed in Sixty Doctoral Dissertations Highly Relevant to Adult Faith Development. (Doctoral Dissertation, Ball State University, 1996). Dissertation Abstract International. Vol. 57-11A, page 4625.
- Vockell, E. L. & Asher, J. W. (1995). Educational Research. Columbus, Ohio: Merrill.
- Williams, M. L. (1993). Spiritual Friendships: A pathway in the development of spiritual maturity. (Doctoral Dissertation, Fuller Theological Seminary, 1993). Dissertation Abstract International, Volume 54-03A, page 0979.